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December 7, 2007

David W. Hacker Attorney-Environmental



VIA FEDERAL EXPRESS OVERNIGHT DELIVERY

Air Enforcement and Compliance Assurance Branch U.S. Environmental Protection Agency Region 5 77 West Jackson Boulevard Chicago, IL 60604

Attn: Compliance Tracker, AE-17J

Dear U. S. EPA Region V Representative:

On or about November 9th, United States Steel Corporation (U. S. Steel) received a Clean Air Act Section 114 Request for Information. In response to that request, U. S. Steel is providing the following information and attachments. Please note for organizational purposes, regardless of the length of the response, U. S. Steel's response to each inquiry is provided as a separate attachment so that the attachment number will correlate to the request number. Per the December 4, 2007, telephone conversation between David Hacker of U. S. Steel and Brian Dickens of U.S. EPA Region V, U. S. Steel continues to collect and review data for responsiveness to these requests and will supplement this response no later than January 8, 2008, at which time the request-specific emissions testing data required by Request No. 13 will also be provided. A certification page is provided immediately prior to the attachments.

1. Provide the date of the most recent reline for each furnace 4, 6, and 8. For each most recent furnace reline, provide narrative description of the changes made to the furnace, explaining the difference in refractory, controls or any other change that was not an exact replacement in kind. Provide the production from each furnace for the 4 years prior to the most recent reline and 4 years after the most recent reline, in tons of hot metal per hour.

Per the December 4, 2007, telephone conversation between David Hacker of U. S. Steel and Brian Dickens of U.S. EPA Region V, U. S. Steel is still searching for, collecting and reviewing data regarding this request and will provide a response no later than January 8, 2008

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Provide the emissions of hydrogen cyanide (HCN) from blast furnace operations for each blast furnace. Provide a narrative description of how U. S. Steel calculated or measured these emissions.

Please refer to Attachment 2 for U. S. Steel's response to this request.

3. Provide a narrative description of how U. S. Steel complies with the VOC reduction requirements stated in 326 1AC 8-7. State if U. S. Steel submitted a RACT plan to IDEM as part of its method of compliance and if so, provide a copy of that plan as it existed on May 14, 2007.

Please refer to Attachment 3 for U. S. Steel's response to this request.

4. Provide instances in which the particulate matter limit found in 326 IAC 6.8-1-2(a) and in Section D.8.3 and D.9.3 of U. S. Steel's Title V permit was not met for the roof monitors of No. 1 BOP Shop and No. 2 Q-BOP Shop in the period January 1, 2002 to the date of receipt of this letter. Provide a narrative description of how U. S. Steel complies with the particulate emission limit stated in 326 IAC 6.8-1-2(a).

Please refer to Attachment 4 for U. S. Steel's response to this request.

- 5. Provide the number of hours that the pilot flame was not present for each month from January 1, 2005, through the date of receipt of this request. If U. S. Steel is not able to provide this information because the data is not available, provide the number of times in each month since January 1, 2005, that a flare controlling blast furnace gas emissions has lost its pilot flame.
 - In Attachment 5, U. S. Steel provides a table providing the number of times in each month since January 1, 2005, that a flare controlling blast furnace gas emissions has lost its pilot flame.
- 6. Provide the increase in emissions of sulfur dioxide from the blast furnace casthouse and all emission units that burn blast furnace gas as a result of Pulverized Coal Injection project. Provide a description of the methods U. S. Steel used to arrive at this emission increase.
 - U. S. Steel has been unable to locate any sulfur dioxide emissions data from the blast furnace casthouse or any emission units that burn blast furnace gas as a result of the Pulverized Coal Injection Project. Per the December 4, 2007, telephone conversation between David Hacker of U. S. Steel and Brian Dickens of U.S. EPA Region V, U. S. still will continue to investigate this issue and submit a complete response with data, if any are available, to U.S. EPA no later than January 8, 2008.
- 7. Provide the monthly average sulfur content of the blast furnace gas for blast furnace 13 for the period beginning January 1, 1988, through 1996. If U. S. Steel is not able to provide this information because the data is not available, provide

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all data that states the sulfur content of the No. 4, 6, 8 and 13 blast furnace gas during this time period.

- U. S. Steel has been unable to locate any data generated during the requested time period regarding the sulfur content of Blast Furnace No. 13, except for the attached data from 1996 that was previously provided to U. S. EPA. Per the December 4, 2007, telephone conversation between David Hacker of U. S. Steel and Brian Dickens of U.S. EPA Region V, U. S. Steel will continue to investigate this issue and supplement this response with additional data, if any are available, to U.S. EPA no later than January 8, 2008.
- 8. Provide a narrative description of the control equipment operation in the #14 casthouse. Describe how operations personnel position the pollution control dampers prior to, during and after opening a second tap hole while one hole is already tapping. Also provide a schematic diagram of the pollution control system that indicates the position of the dampers.

Please refer to Attachment 8 for U. S. Steel's response to this request.

9. Provide a copy of all Operation and Maintenance Plans required by the National Emission Standards for Hazardous Air Pollutants, Subpart FFFFF for Integrated Iron and Steel at 40 C.F.R. § 63.7800. Provide a copy of each plan that was in effect on May 14, 2007, and provide the date that each previous and subsequent final version of each plan was generated.

Copies of Operation and Maintenance Plans that are responsive to this request are provided in Attachment 9.

10. Provide a narrative description of the methods U. S. Steel uses to control emissions from hot iron transfer railcars (bottle cars) as they move through the plant.

Please refer to Attachment 10 for U. S. Steel's response to this request.

11. Provide a copy of all Title V quarterly deviation reports that U. S. Steel has submitted to IDEM, or its agent as of the date of your receipt of this request.

Copies of Title V quarterly deviation reports that U. S. Steel has submitted to IDEM are provided in Attachment 11.

12. Provide a copy of the blast furnace #14 permit to construct/install.

A copy of the blast furnace #4 significant source modification permit is provided in Attachment 12.

13. Emissions Testing – U. S. Steel must conduct tests to determine the opacity of particular matter being emitted to the environment according to the schedule

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below. Specifically, U. S. Steel must perform the following tests to 40 CFR Part 60, Appendix A, EPA Method 9 for:

- The #4 partial enclosure around the iron spout and bottle car/torpedo car for two consecutive taps, twice per week (four heats per week) for two consecutive weeks.
- The #6 partial enclosure around the iron spout and bottle car/torpedo car for two consecutive taps, twice per week (four heats per week) for two consecutive weeks.
- The #8 partial enclosure around the iron spout and bottle car/torpedo car for two consecutive taps, twice per week (four heats per week) for two consecutive weeks.
- The gas cleaning system stacks at the No. 1 BOP Shop and NO. 2 Q-BOPShop during two consecutive steel-making cycles (scrap charge, hot metal charge, blow, tap, etc.) twice per week (four per week total) for two consecutive weeks.
- The roof monitors at the No. 1 BOP Shop and NO. 2 Q-BOP Shop during two consecutive steel-making cycles (scrap charge, hot metal charge, blow, tap, etc.) twice per week (four per week total) for two consecutive weeks.
- Building openings near the No. 2 Q-BOP Shop slag skimming operation for four slag skimming events for two consecutive weeks.
- a. U. S. Steel must begin taking these readings within two weeks of receipt of this request.
- b. The results of these reading and any related information shall be submitted within 60 days of receipt of this request
- c. For readings taken at the No. 4, 6, and 8 partial enclosures around the iron spouts and the No. 2 Q-BOP Shop slag skimming area, the readings must be taken just on the outside of the partial enclosures where particulate, if any, escapes to the atmosphere. Reading shall not be taken at the roof monitor of the respective shops.
- d. U.S. Steel must record and submit to EPA any operational practice or parameter that existed during the time of the opacity readings that is different from normal conditions.
- U. S. Steel must record and submit to EPA the time that the tap hole was opened and closed during the period readings were taken at the blast furnaces.
- f. U. S. Steel must submit the results of any other emission or opacity tests, emissions characterization, or emission studies, conducted or attempted between the date of receipt of this request and the date of response of this request.

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- U. S. Steel has implemented the emissions testing as described in this request and will submit the results by January 8, 2008.
- 14. From January 1, 2002 until the date of receipt of this letter, provide all stack tests and engineering tests conducted at coke oven batteries 2, 5 and 7.

Stack tests and engineering tests conducted from January 1, 2002 until November 9, 2007 conducted at coke oven batteries 2, 5 and 7 are provided in Attachment 14.

15. From January 1, 2002 until the date of receipt of this letter, provide all excess emissions reports for coke oven batteries 2, 5 and 7.

Please refer to Attachment 15 for U. S. Steel's response to this request.

16. From January 1, 2002 until the date of receipt of this letter, provide all stack tests and engineering tests conducted at the No. 1 BOP Shop and No. 2 Q-BOP Shop.

Stack tests and engineering tests conducted at the No. 1 BOP Shop and No. 2 Q-BOP Shop dated from January 1, 2002 until November 9, 2007 are provided in Attachment 16.

17. From January 1, 2002 until the date of receipt of this letter, provide all excess emissions and deviation reports for the No. 1 BOP Shop and No. 2 Q-BOP Shop. Also include reports that show visible emission exceedances at the No. 1 BOP Shop and No. 2 Q-BOP Shop, as recorded daily in accordance with Section D.8.11 of U. S. Steel's Title V permit.

Please refer to Attachment 17 for U. S. Steel's response to this request.

18. Provide all pickling line performance tests, not including appendices, which have been conducted since June 2005, no including the November 15, 2005 test conducted on the 84" Pickling Line and the November 17, 2005 test conducted on the 80" Pickling Line.

Please refer to Attachment 18 for U. S. Steel's response to this request.

19. From January 1, 2002 until the date of receipt of this letter, provide all performance reports prepared to satisfy requirements of 40 C.F.R. 63, Subpart CCC (Steel Pickling NESHAP).

Performance reports prepared to satisfy requirements of 40 C.F.R. 63, Subpart CCC (Steel Pickling NESHAP) dated from January 1, 2002 until November 9, 2007 are provided in Attachment 19.

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20. Provide all maintenance records for any equipment subject to 40 C.F.R. Part 61 Subpart V from January 2002 to present. Include records for maintenance requests relating to equipment leaks.

Records responsive to this request are provided in Attachment 20.

Very truly yours

David W. Hacker

cc: Thomas Easterly, Commissioner Indiana Department of Environmental Management 100 North Senate Avenue Indianapolis, IN 43204

- K. Mentzel
- J. Alexander
- J. Volanski (w/out attachments)
- T. Woodwell
- M. Jeffrey

CERTIFICATION

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based upon my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statement and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to section 113(c)(2) of the Act, and 18 U.S.C. Sections §§ 1001 and 1341.

MS Williams

Michael S. Williams General Manager U. S. Steel Gary Works